2. Rastaviti na činioce:

  a) $0{,}125x^3 - (x+1)^3$
  b) $(x+2y)^3 - (3x-2y)^3$

    a) $0.125x^3 - (x+1)^3$

          $(0.5x)^3 - (x+1)^3$ ovo je razlika kubova

$$a^3 - b^3 = (a-b)\cdot\left(a^2 + ab + b^2\right)$$

$$(0.5x - (x+1))\cdot\left(0.25x^2 + 0.5x(x+1) + (x+1)^2\right)$$
$$(0.5x - x - 1)\cdot\left(0.25x^2 + 0.5x^2 + 0.5x + x^2 + 2x + 1\right)$$
$$(-0.5x - 1)\cdot\left(1.75x^2 + 2.5x + 1\right)$$

    b) $(x+2y)^3 - (3x-2y)^3$ ovo je razlika kubova

$$a^3 - b^3 = (a-b)\cdot\left(a^2 + ab + b^2\right)$$

$$((x+2y) - (3x-2y))\cdot\left((x+2y)^2 + (x+2y)(3x-2y) + (3x-2y)^2\right)$$

$$(x+2y - 3x + 2y)\cdot\left(x^2 + 4xy + 4y^2 + 3x^2 - 2xy + 6xy - 4y^2 + 9x^2 - 12xy + 4y^2\right)$$
$$(4y - 2x)\cdot\left(13x^2 - 4xy + 4y^2\right)$$